

ANGLED GRIPPING JOINT COMBINATION FOR SUPPORT STRUCTURES

ABSTRACT OF THE DISCLOSURE

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This invention relates to apparatus used in the assembly and structure of tables, benches, sawhorses, and scaffolds. In particular, the invention discloses a U-beam top joint with lumber end portion gripping means used in combination with a U-beam splay bar, which are used in pairs or greater multiples to hold pieces of lumber in the required position to form the desired structure. The U-beam top joint with lumber end gripping means comprises at least one U-beam adapted to support a cross-beam of horizontal lumber to form the top of the structure, and affixed to inward facing angled end brackets to fit a top portion of each of a pair of angled lumber legs flanking the cross-beam lumber top. The U-beam splay bar comprises at least one U-beam having at each end thereof two angled outward facing end brackets adapted to fit a middle portion of the pair of angled lumber legs. The combination can be readily transported to a recreation or construction site and used to assemble a picnic table, bench, sawhorse with lumber fence, bench, scaffold or like structure with available lumber, cut to form the desired height for the structure. The U-beam top joint with lumber end gripping means and the U-beam splay

bar interact with the lumber legs and cross-beam such that an increase in load on the cross-beam causes a proportional increase in the rigidity and stability of the structure. The U-beam top joint and the U-beam splay bar each have side lumber brackets by which multiple top joints and splay bars can be linked to each other.

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